

AN - 1978-08433A [25]

CPY - RICH-N

DC - D16 M25

FS - CPI

IC - C12B0/01 ; C22B0/01

IN - TORMA A E

MC - D05-A04 M25-B

PA - (RICH-N) MIN RICH NAT QUEBEC

PN - CA1023947 A 19780110 DW197805 000pp

PR - CA19740203547 19740627

XIC - C12B-000/01 ; C22B-000/01

AB - CA1023947 Cd, Cu and Zn values are selective extracted from Pb ores or concentrates (metal present as sulphides) by first grinding the ore/concentrate to small solid particles, then contacting the surfaces of these particles with an aq. nutrient medium at 20-40 degrees, of pH 1.5-4.0 and contg. H2SO4, to give a leach suspension.

- The suspension is then inoculated with a strain of adapted, aerobic, autotrophic Fe- and S-oxidising Thiobacillus ferrooxidans and the mixt. stirred while aerating with CO2-enriched air. It is then filtered to obtain a liq. fraction contg. the extracted metals. Pref. pH is held at 2.3 and temp. at 35 degrees C.

- The metals are obtd. in pure form directly so that treatment following recovery of Pb in smelters is avoided. Some PbS is oxidised to the sulphate (which requires heat during sintering) so that the recycle load needed to dissipate heat in sintering is reduced.

IW - BACTERIA LEACH SULPHIDE LEAD ORE THIOBACILLUS FERROOXIDANS SELECT RECOVER ZINC COPPER CADMIUM

IKW - BACTERIA LEACH SULPHIDE LEAD ORE THIOBACILLUS FERROOXIDANS SELECT RECOVER ZINC COPPER CADMIUM

INW - TORMA A E

NC - 001

OPD - 1974-06-27

ORD - 1978-01-10

PAW - (RICH-N) MIN RICH NAT QUEBEC

TI - Bacterial leaching of sulphide lead ores - with Thiobacillus ferrooxidans for selective recovery of zinc, copper and cadmium